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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,419	06/28/2000	Scott S. Firestone	CISCP155/1539	6069

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EXAMINER

RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 03/12/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

**Application No.**

09/606,419

**Applicant(s)**

FIRESTONE, SCOTT S.

**Examiner**

Andy S. Rao

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/24/03 as Paper 10 has been entered.
2. Applicant's arguments with respect to claims 1-33 as in Paper 11 filed on have been considered but are moot in view of the new ground(s) of rejection addressing the newly added limitations.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

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do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhu (US Patent: 6,201,834).

Zhu discloses a method for preparing a compressed audio, video, or multimedia bitstream (Zhu: column 3, lines 10-20) to facilitate real time streaming of the bitstream (Zhu: column 2, lines 1-6), the method comprising: parsing the bitstream to identify network packet boundaries in the bitstream (Zhu: column 4, lines 7-23); annotating a bitstream header (Zhu: column 4, lines 18-20) with network packet information specifying the network packet information (Zhu: column 4, lines 25-30) such that a streaming apparatus can use the network packet information from the bitstream header (Zhu: column 5, lines 45-50) to rapidly divide the bitstream into network packets for real-time streaming (Zhu: column 5, lines 35-42), as in claim 1.

Regarding claim 2, Zhu discloses that the network packet information includes an index (Zhu: column 6, lines 1-25), as specified.

Regarding claim 3, Zhu discloses that the index includes starting and ending byte locations for MPEG packets (Zhu: column 6, lines 15-25; column 1, lines 45-55), as in the claim.

Regarding claims 4-6, Zhu discloses inserting the index into elementary video stream (Zhu: column 6, lines 1-25), as in the claims.

Regarding claim 7, Zhu discloses a length label specifying how many bits are to be included in the network packet (Zhu: column 3, lines 55-65), as in the claim.

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Regarding claim 8, Zhu discloses a type designation indicating the type of data from the bitstream (Zhu: column 4, lines 40-50), as in the claim.

Regarding claim 9, Zhu discloses that the network packet information includes an index specifying a byte position in the bitstream (Zhu: column 1, lines 1-25), as in the claim.

Regarding claims 10-11, Zhu discloses the creation of a modified system stream (Zhu: column 5, lines 23-35), as in the claims.

Regarding claim 12, Zhu discloses that the modified system stream is an MPEG bitstream (Zhu: column 1, lines 50-55), as in the claim.

Regarding claims 13-14, Zhu discloses that the beginning of the network boundary is located according to a start code included in the MPEG bitstream (Zhu: column 6, lines 30-35), as in the claim.

Regarding claim 15, Zhu discloses that the network packet information includes network packet header information (Zhu: column 4, lines 37-42), as in the claim.

Regarding claim 16, Zhu discloses that the network packet boundaries are variably sized (Zhu: column 3, lines 55-65), as in the claims.

Regarding claim 17, Zhu discloses that the network packet boundaries are constant sized (Zhu: column 4, lines 13-17), as in the claim.

Regarding claim 18, Zhu discloses adding a flag to the bitstream which signals that the bitstream is annotated (Zhu: column 6, lines 35-40), as in the claim.

Zhu discloses a computer program product (Zhu: column 2, lines 18-25) comprising a machine readable medium on which is provided instructions (Zhu: column 1, lines 15-20; column 1 lines 35-37) for preparing a compressed audio, video, or multimedia bitstream (Zhu:

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column 3, lines 10-20) to facilitate real time streaming of the bitstream (Zhu: column 2, lines 1-6), the instructions comprising: parsing the bitstream to identify network packet boundaries in the bitstream (Zhu: column 4, lines 7-23); annotating a bitstream header (Zhu: column 4, lines 15-20) with network packet information specifying the network packet information (Zhu: column 4, lines 25-30) such that a streaming apparatus can use the network packet information from the bitstream header (Zhu: column 5, lines 45-50) to rapidly divide the bitstream into network packets for real-time streaming (Zhu: column 5, lines 35-42), as in claim 19.

Regarding claim 20, Zhu discloses that the network packet information includes an index (Zhu: column 6, lines 1-25), as specified.

Regarding claim 21-22, Zhu discloses that the bitstream is an MPEG bitstream (Zhu: column 6, lines 15-25; column 1, lines 45-55), as in the claims.

Regarding claims 23, Zhu discloses that the network packet information specifies network packet boundaries (Zhu: column 4, lines 23-25), as in the claim.

Zhu discloses of performing (Zhu: column 3, lines 10-20) real time streaming a bitstream (Zhu: column 2, lines 1-6), the method comprising: parsing the bitstream to identify network packet boundaries in the bitstream (Zhu: column 4, lines 7-23); annotating a bitstream header (Zhu: column 4, lines 15-20) with network packet information specifying the network packet information from (Zhu: column 4, lines 25-30); storing the annotated bitstream (Zhu: column 5, lines 1-10); block streaming the bitstream in real-time using the network packet information from the bitstream header (Zhu: column 5, lines 45-50) to divide the bitstream into network packets (Zhu: column 5, lines 35-42), as in claim 24.

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Regarding claim 25, Zhu further discloses that the annotated bitstream is a RTP bitstream (Zhu: column 5, lines 25-35), as in the claim.

Regarding claim 26, Zhu further discloses demultiplexing the bitstream (Zhu: column 1, lines 60-67), as in the claim.

Regarding claims 27-28, Zhu further discloses that the bitstream is annotated with network packet information (Zhu: column 4, lines 24-29), as in the claim.

Zhu discloses a system for transmitting (Zhu: column 3, lines 10-20) a compressed audio, video, or multimedia bitstream (Zhu: column 2, lines 1-6; figure 1), the system comprising: a demultiplexer (Zhu: column 1, lines 63-62); a segmentor capable of annotating a bitstream sequence header (Zhu: column 2, lines 35-43) with network packet information specifying the network packet boundaries (Zhu: column 4, lines 25-30); a multiplexer (Zhu: column 1, lines 24-34); a streaming apparatus that uses the network packet information from the bitstream sequence header (Zhu: column 5, lines 45-50) to divide the bitstream into network packets for real-time streaming (Zhu: column 5, lines 35-42), as in claim 29.

Regarding claim 30, Zhu further discloses producing an annotated video stream containing the network packet information (Zhu: column 5, lines 25-35), as in the claim.

Regarding claims 31-33, Zhu further discloses demultiplexing the bitstream (Zhu: column 1, lines 60-67), as in the claim.

Regarding claims 34-35, Zhu further discloses producing a modified bitstream including the network packet information specifying network packet boundaries (Zhu: column 5, lines 1-10), as in the claims.

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Regarding claim 36, Zhu discloses that the streaming apparatus uses a single block copy for a network packet for real-time streaming (Zhu: column 6, lines 35-40), as in the claim.

Zhu discloses a system for transmitting (Zhu: column 3, lines 10-20) a compressed audio, video, or multimedia bitstream (Zhu: column 2, lines 1-6; figure 1), the system comprising: a demultiplexer for separating a system stream into an audio stream and a video stream (Zhu: column 1, lines 63-6); a segmentor capable of annotating the GOP header the video stream (Zhu: column 1, lines 45-55) with network packet information specifying the network packet boundaries (Zhu: column 4, lines 25-30); a multiplexer for combining the audio and video streams into a modified system stream (Zhu: column 1, lines 24-34); a streaming apparatus for dividing the modified system bitstream into network packets for real-time streaming using the network packet information (Zhu: column 5, lines 35-42) from the GOP header (Zhu: column 5, lines 45-50), as in claim 37.

Zhu discloses a system for transmitting (Zhu: column 3, lines 10-20) a compressed audio, video, or multimedia bitstream (Zhu: column 2, lines 1-6; figure 1), the system comprising: means for separating a system stream into an audio stream and a video stream (Zhu: column 1, lines 63-6); means for annotating a video stream header (Zhu: column 4, lines 15-20) with network packet information specifying the network packet boundaries (Zhu: column 4, lines 25-30); means for combining the audio and video streams into a modified system stream (Zhu: column 1, lines 24-34); and means for dividing the modified system bitstream into network packets for real-time streaming using the network packet information (Zhu: column 5, lines 35-42) from the video stream header (Zhu: column 5, lines 45-50), as in claim 38.



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*Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao  
Primary Examiner  
Art Unit 2613

ANDY RAO  
PRIMARY EXAMINER

asr  
March 9, 2004